**Before the**
**Federal Communications Commission**
**Washington, D.C. 20554**

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| In the Matter of | ) | |
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| Amendment of Parts 2, 15, 18 and Other | ) | ET Docket No. 97-94 |
| Parts of the Commission's Rules to Simplify | ) | |
| and Streamline the Equipment Authorization | ) | |
| Process for Radio Frequency Equipment | ) | |
| | ) | |

# NOTICE OF PROPOSED RULE MAKING

**Adopted: March 13, 1997 ; Released: March 27, 1997**

**Comment Date:** 75 days from date of publication in the Federal Register
**Reply Comment Date:** 105 days from date of publication in the Federal Register

By the Commission:

## INTRODUCTION

1. By this action, the Commission proposes to amend Parts 2, 15, 18 and other rule parts to: 1) simplify our existing equipment authorization processes; 2) deregulate the equipment authorization requirements for certain types of equipment; and 3) provide for electronic filing of applications for equipment authorization. These actions will greatly reduce the complexity and burden of the Commission's equipment authorization requirements. Further, these steps will improve the efficiency of the equipment authorization process so that products can be introduced to the market more rapidly. They would reduce the number of applications required to be filed with the Commission annually from about 3500 to approximately 1800, significantly reducing paperwork requirements on manufacturers. A similar, previous action was estimated to save the computer industry $250 million annually, and savings of at least another $100 million can be expected for the products covered by the current proposal.[1] The provision for electronic filing of applications should reduce by more than half the current applications processing time of approximately 40 days. We believe these actions will greatly benefit both large and small manufacturers and encourage the development of innovative products that best meet consumer's needs.

[1] See Report and Order, ET Docket No. 95-19, 11 FCC Rcd 17915 (1996), In the Matter of Amendment of Parts 2 and 15 of the Commission's Rules to Deregulate the Equipment Authorization Requirements for Digital Devices.

## BACKGROUND

2. Section 302 of the Communications Act of 1934, was adopted with the clear purpose of ensuring that radio transmitters and electronic devices meet standards to control radio interference before such equipment reaches the marketplace. This section authorizes the Commission, consistent with the public interest, convenience, and necessity, to make reasonable regulations governing the interference potential of devices which in their operation are capable of emitting radio frequency energy by radiation, conduction, or other means in sufficient degree to cause harmful interference to radio communications.[2] Further, no person shall manufacture, import, sell, offer for sale, or ship devices or use devices that fail to comply with regulations promulgated under this section. Prior to adoption of this section, there had been numerous instances of devices that had reached the marketplace in massive quantities and caused widespread interference to radio communications. It was impractical and inefficient to attempt to resolve interference caused by such devices on a case-by-case basis. Moreover, often the only way to resolve the interference was to require that operation of the device cease or that the device be modified, at great inconvenience and expense to consumers. More importantly, radio frequency devices often posed an unacceptable risk of interference to vital safety communications, such as police and fire communications and aeronautical and maritime navigation systems.

3. The Commission has carried out its responsibilities under Section 302 through two principal means. First, the Commission has established technical regulations for radio transmitters and certain electronic equipment to control radio frequency interference. Second, the Commission has required such devices to be authorized to ensure that the equipment meets the technical requirements. The equipment authorization process is accomplished largely through use of the private sector. That is, the manufacturer tests the product to determine whether it meets the technical requirements. In many cases the manufacturer self-approves its equipment. However, for certain types of equipment that have been found to pose a strong risk of noncompliance, the Commission requires submission of a written application for equipment authorization. The Commission may request a sample of the device to check the results, however, this is done in a small minority of cases.

## DISCUSSION

4. The Commission's equipment authorization program has been a resounding success in controlling interference. Today, hundreds of millions of radio transmitters, consumer products and electronic devices all share the airwaves with remarkably little interference. Continuing to ensure compliance with our technical requirements through the equipment authorization program is even more important for the future. The radio spectrum is becoming ever more crowded as new radio services are added and existing services continue to grow.

[2] See 47 U.S.C. Section 302(a) and (b).

We recognize that companies are making enormous investments to obtain licenses to use the spectrum and to construct communications systems. These investments and the success of new services could easily be jeopardized by the threat of radio frequency interference. We note, in particular, that concerns about interference exist in many areas, such as interference to hearing aids from wireless equipment, interference to medical devices, interference to aeronautical communications from carry-on consumer electronic devices, and interference at mobile radio antenna sites. We also note that vital policy objectives, such as controlling the environmental effects of radio frequency radiation, closed captioning of TV receivers, compatibility of TV receivers with cable systems, and prohibitions against scanning receivers that are capable of receiving cellular radio transmissions, are being ensured in whole or in part through the equipment authorization program. We believe that the equipment authorization program remains essential to the Commission's mission.

5. At the same time, we note that the current equipment authorization procedures have evolved over the course of more than 25 years. We observe that the current multiplicity of equipment authorization processes has resulted in an extensive and complicated set of regulations. Manufacturers are often confused as to the requirements and procedures they must follow, which can sometimes lead to delays in introducing products to the market. Such delays can cause a manufacturer to lose its competitive advantage. The fast pace of today's telecommunications and electronics industries has heightened the need for equipment authorization procedures that are clear, rapid and efficient. Accordingly, we are initiating this proceeding on our own motion to provide a simpler, less burdensome path for products to be marketed in the United States. We recognize that many parties have an interest in these rules. We intend to solicit as broad a range of comments and alternative suggestions as possible. Our specific proposals are discussed below.

Simplification of Existing Equipment Authorization Processes

6. The FCC rules specify technical requirements for radio and electronic equipment to control radio frequency interference.[3] Part 15, for example, contains technical requirements for unintentional and intentional radiators; Part 22 contains technical requirements for transmitters used in the commercial mobile radio services; and, Part 90 specifies the technical requirements for transmitters used in the private land mobile radio services. In order to ensure compliance with the technical requirements, the rules generally require the equipment

[3] In some cases devices must meet technical requirements that are not related to interference. For example, TV receivers with screen sizes greater than 13" must be capable of displaying closed captioning. Also, certain radio transmitters must demonstrate compliance with standards designed to protect against harmful biological effects from exposure to radio frequency energy.

to be authorized in accordance with one of the procedures in Part 2 Subpart J of the rules.[4] The equipment authorization procedures are as follows:

**Type acceptance** is an equipment authorization issued by the Commission for equipment to be used pursuant to a station authorization (i.e., in authorized radio services such as commercial and private land mobile radio services). Type acceptance is based on submittal of a written application that includes a complete technical description of the product and a test report showing compliance with the technical requirements. This procedure has been used for most equipment operating in the "authorized" radio services (i.e., including those licensed individually or covered by a blanket license or rule).

**Certification** is an equipment authorization issued by the Commission for equipment designed to be operated without individual license under Parts 15 and 18 of the rules. Certification is based on submittal of a written application that includes a complete technical description of the product and a test report showing compliance with the technical requirements. In this regard, the process is very similar to type acceptance, however, the nature of the technical requirements for equipment operated under Parts 15 and 18 tends to differ significantly from the requirements for equipment used in authorized radio services.[5]

**Notification** is an equipment authorization issued by the Commission whereby the applicant makes measurements to determine that the equipment complies with the appropriate technical standards and reports that such measurements have been made and demonstrate the necessary compliance. Submittal of test data to the Commission demonstrating compliance is not required unless specifically requested by the Commission. Notification has been applied to a variety of equipment where there is a reasonably good likelihood of compliance.

[4] See 47 CFR Part 2, Subpart J, Section 2.901, et seq. The Commission recently deleted the "type approval" procedure. See Report and Order in ET Docket No. 94-45, In the Matter of Revision of Part 2 of the Commission's Rules relating to the Marketing and Authorization of Radio Frequency Devices, adopted February 3, 1997 Type approval was an equipment authorization issued by the Commission based on examination and measurement of one or more sample units by the Commission at its laboratory. There was no longer are any equipment subject to type approval.

[5] Devices operating under Parts 15 and 18 generally must meet limits on radiated and power line conducted emissions. Transmitters operating in the authorized radio services generally must meet requirements for output power, frequency stability, out-of-band and spurious emissions, etc.

**Verification** is a manufacturer self-approval procedure where the manufacturer makes measurements or takes the necessary steps to ensure that the equipment complies with the appropriate technical standards. This procedure has been applied for certain devices operating under Parts 15 and 18 of the rules.

**Declaration of Conformity (DoC)** is a relatively new self-approval procedure that also calls for the manufacturer or importer of the equipment to make measurements or take other necessary steps to ensure that the equipment complies with the appropriate technical standards. This procedure was established in connection with the Commission's deregulation of the certification requirements for personal computer equipment.[6] A statement declaring that the equipment complies with the FCC rules must be included in the literature furnished with the product. The test laboratory performing the compliance measurements must be accredited by either the National Institute of Standards and Technology (NIST) or the American Association for Laboratory Accreditation (A2LA).

7. Applications for equipment authorization are processed at the FCC Laboratory in Columbia, Maryland. Applications are usually processed in about 40 days, but can take longer if additional information must be submitted to complete or correct the application. The FCC Laboratory may request a sample device for testing, either in connection with an application for equipment authorization or once a product has been placed on the market. The equipment authorization process must be completed before importation and marketing can begin.[7] As noted, there are currently several different equipment authorization processes. We believe that certain of these processes can be eliminated and others combined to greatly simplify the requirements, eliminate unnecessary rules and reduce regulatory burdens. Our specific proposals are discussed below.

8. The type acceptance and certification procedures are similar in many respects. They both involve submittal of a written application, technical description of the equipment, measurement report showing compliance with the technical standards, photographs of the equipment and certain other information. The principal difference between the procedures, as noted above, is that type acceptance has usually applied to equipment operating in the authorized radio services, while certification has usually applied to equipment operating under Parts 15 and 18. We observe, however, that this distinction is becoming less clear. For example, the Commission recently required transmitters operating in the Family Radio Service under Part 95 of the rules to be certificated. We believe that there would be several benefits if the certification and type acceptance procedures were combined into one procedure. The regulations would be simplified by eliminating duplicative requirements. We believe that simpler rules would reduce errors that lead to deficient applications and noncompliance.

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[6] See Report and Order in ET Docket No. 95-19, supra.

[7] See 47 CFR Section 2.801, et seq.

Where the rules currently require multiple applications for certain equipment, a single application would suffice. Accordingly, we are proposing to eliminate the type acceptance procedure and incorporate into the certification procedure those requirements that continue to be necessary for equipment used in the authorized services. We believe it is appropriate to maintain use of the term certification because this term is used internationally for similar procedures.

9. We recognize that there are several similar rule sections under the type acceptance and certification procedures, such as the requirements for information that must be included in an application and for permissive changes.[8] We propose generally to supplement the existing certification rules with any additional information that may continue to be needed for equipment used in the authorized radio services. We also note that the current type acceptance procedures include considerable information on the required measurements.[9] We believe these regulations continue to be necessary. We propose to include these regulations under the certification procedure, but will indicate that they apply only to equipment used in the authorized radio services. We invite comments on these proposals.

10. The notification procedure was initially established in the 1980s for equipment that no longer warranted type acceptance or certification, but still posed sufficient risk of noncompliance to monitor the introduction of new products. Therefore, the notification procedure required submittal of a written application, but without technical data. It was believed that by monitoring equipment through the application process, potential compliance problems could be identified quickly and technical data could be requested as necessary. It was expected that compliance would also be facilitated by having the name and address of the party responsible for compliance. We have found little benefit from the notification procedure. Equipment that is currently subject to notification has rarely exhibited any compliance problems. However, such applications have sometimes experienced delays in the equipment authorization process due to minor administrative errors. We do not believe the benefit from review of such applications warrants the delays that can result. Accordingly, we are proposing to delete the notification procedure. We are generally proposing that equipment formerly subject to notification would instead be subject to either the DoC or verification procedure, with our specific proposals given below. We invite comment on the continued need for the notification procedure.

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[8] See 47 CFR Section 2.983 Information to be included in an application for type acceptance and 47 CFR Section 2.1033 Information to be included in an application for certification; and, 47 CFR Section 2.1001 Changes in type accepted equipment and 47 CFR Section 2.1043 Changes in certificated equipment.

[9] See 47 CFR Section 2.985 Measurements required: RF power output; 47 CFR Section 2.987 Measurements required: Modulation characteristics; 47 CFR Section 2.989 Measurements required:Occupied bandwidth; 47 CFR Section 2.991 Measurements required: Spurious emissions at antenna terminals; 47 CFR Section 2.993 Measurements required: Field strength of spurious radiation; 47 CFR Section 2.995 Measurements required: Frequency stability; 47 CFR Section 2.997 Frequency spectrum to be investigated; and 47 CFR Section 2.999 Measurement procedure.

11. We observe that the verification and DoC procedures are also similar in that they are both manufacturer self-authorization procedures. However, there are several important differences. The DoC procedure requires use of an accredited test laboratory; the verification procedure requires only that the laboratory retain a description of its measurement facilities.[10] The DoC procedure requires the manufacturer to include a written Declaration of Compliance with the literature furnished to the user, in part as a means to identify the party responsible for FCC compliance; no information is required to be provided to the user for verified equipment. The DoC procedure requires use of an FCC logo on the equipment identification label to promote compliance by providing a means for consumers to identify equipment that meets FCC regulations; verification requires only that the equipment be uniquely identified. There are a number of other minor differences between the two sets of rules.

12. We are proposing to maintain the DoC and verification procedures. The DoC procedure was established only recently and any further changes at this time would be disruptive. Further, we note that the verification procedure provides a means to authorize equipment that imposes very little burden on manufacturers. We believe such a procedure is appropriate for equipment that has an excellent record of compliance, where the measurement methods are well known and understood, and it is relatively easy to determine the party responsible for compliance. Nevertheless, we invite comment as to whether we should maintain DoC and verification as separate procedures or whether there may be some benefit in combining these procedures in some fashion. For example, one option would be to eliminate verification, shift all the equipment to the DoC procedure, and exempt certain equipment from the requirement to use an accredited test laboratory.

13. We recognize that these proposed changes raise a number of additional issues. The Commission currently maintains a Radio Equipment List of transmitters that have been type accepted or notified for operation in the various radio services. This list was begun in the early days of the type acceptance program. The rules for the authorized services often state that the licensee must employ equipment on the Radio Equipment List. In recent years the list has been maintained by printing supplements, rather than by reprinting the entire list. Alternative means are now available to check whether equipment has been authorized and for what services.[11] In proposing to drop the notification requirement for certain transmitters used in the authorized services, there will no longer be a means to include such equipment on the Radio Equipment List. However, the manufacturer could simply provide the user with information indicating the rules with which the equipment complies. We are therefore

[10] See 47 CFR Section 2.948(a).

[11] The Commission will continue to maintain its data base of equipment that has been authorized. The public can check on the status of applications and whether specific equipment has been authorized via the Public Access Link (PAL), which can be accessed via computer modem at (301) 725-1072. Also, the equipment authorization data base is available for searches and downloading on the FCC Internet Web site located at http://www/fcc.gov/.

proposing to discontinue maintenance of the Radio Equipment List. If there continues to be a need for this list, we would include on the list all certificated equipment other than equipment operating under Parts 15 and 18. We invite comments on this proposal and alternative suggestions for addressing this matter.

14. Currently the application fees are typically $ 450 for type acceptance and $ 895 for certification.[12] We are proposing that under the new combined certification procedure the fee will be $ 895 for devices operating under Parts 15 and 18 of the rules and $ 450 for everything else. Both charges will be applied for products that contain devices that require certification under either Part 15 or 18 and other rule parts, excluding telephone equipment registration under Part 68. This proposal will not affect the fees currently paid by applicants for most equipment. Transmitters used in the Family Radio Service that currently require certification under Part 95 would be subject to the reduced fee of $ 450. We request interested parties to address this proposed approach to the application fees.

15. As noted below, we will be placing greater reliance on use of the DoC and verification processes, which will lessen the burden on manufacturers. We believe that some changes in the rules are needed to improve oversight of the compliance of equipment on the market. Under Section 2.946 of the rules, any responsible party, or any party who markets equipment subject to the rules has up to 60 days to provide a test sample upon request by the Commission. When equipment is widely available on the U.S. market, 60 days is an unreasonable period to wait for submittal of a sample, particularly where the Commission may have cause to suspect that a particular piece of equipment does not meet FCC technical standards. Accordingly, for equipment that is widely available on the market we are proposing to require submittal of a sample to the Commission for testing within 14 days of request. To accomplish this, we are proposing to require manufacturers to provide a voucher upon request for purchase of a sample equipment at a retail outlet. We solicit comment on this proposal and invite alternative suggestions for improving oversight of equipment on the market.

16. We would also like to take this opportunity to clarify the rules that apply to corporate mergers, buyouts, acquisitions, etc. involving grantees of equipment authorization. Section 2.929 of the rules states that an equipment authorization issued by the Commission may not be assigned, exchanged, or in any other way transferred to a second party.[13] Section 2.935 states that in the case of a transfer of control of the grantee of an equipment authorization, as in the case of sale or merger of the grantee, notice of such transfer must be received by the Commission not later than 60 days subsequent to the consummation of the

12 See 47 CFR Section 1.1103 for the schedule of charges for equipment authorization. The certification fee for receivers is $330; however, under the proposals in this Notice receivers will no longer require certification. The proposals we are making herein would remain generally consistent with 47 U.S.C. Section 158.

13 See 47 CFR Section 2.929.

agreement effecting the transfer of control.[14] Depending on the circumstances in each case, the Commission may require new applications for equipment authorization for each device or equipment held by the predecessor in interest, production of which will be continued by the acquiring party. We recognize that corporate mergers and acquisitions have become a common occurrence. We observe that the application of the two rules is often unclear for specific transactions. For example, in situations where a grantee is absorbed into another company, the rules seem to suggest that new applications would be required for all the equipment that was previously authorized. If numerous pieces of equipment are involved, the cost can be considerable. We do not believe our processes should so encumber such transactions provided that compliance with the regulations continues to be ensured. We are proposing to combine these rules into one and clarify that the party assuming responsibility for the equipment may file a single application covering all the affected equipment.

17. In summary, the proposals we are making will reduce our current five equipment authorization processes to three: certification for equipment that will be authorized by the Commission; and Declaration of Conformity or verification for equipment that will be self-authorized by the manufacturer or importer. We believe these proposals will lead to a simpler and far less cumbersome set of equipment authorization requirements. Errors in applications that can lead to delays in obtaining equipment authorization should decline. Further, we believe that clearer, less burdensome regulations will promote compliance. We are also proposing to delete various rules that are now obsolete, such as the labelling requirements listed in Sections 2.1003 and 2.1045 pertaining to labelling of equipment authorized before May 1, 1981.[15] We believe that these proposals will further advance our statutory mandate under Section 257(a) of the Telecommunications Act of 1996 to eliminate market entry barriers for small businesses, such as manufacturers who supply parts and services to telecommunications service providers, to speed delivery of their products to the public.[16] Our specific proposals to amend Part 2 Subpart J are contained in Appendix B. We are aware that the various equipment authorization procedures are referenced in many places throughout the rules. We will conform the various rules that reference the equipment authorization procedures based on the decisions we ultimately make on these proposals. We solicit views on alternative ways of simplifying the equipment authorization procedures, eliminating unnecessary requirements, and improving the equipment authorization processes.

Deregulation of Equipment Authorization Requirements for Various Equipment

18. A list of the equipment authorization requirements for various types of equipment is provided in Appendix C. We have not reviewed the requirements for many types of

[14] See 47 CFR Section 2.935.

15 See 47 CFR Sections 2.1003 and 2.1045.

16 See 47 U.S.C. § 257(a).

equipment for 10 years or longer.[17] We believe that submittal and review of equipment authorization applications to the Commission is no longer warranted for certain equipment where the technical requirements are met with little difficulty, the test methods are widely understood, interpretive questions arise infrequently, and there has been an excellent record of compliance. Accordingly, we are proposing to relax the equipment authorization requirements for various types of equipment based on our experience in reviewing applications and our assessment of the appropriate procedure required to ensure continued compliance. We recognize that there currently is no laboratory accreditation available for tests on certain of the equipment proposed to be shifted to the DoC procedure, however, we believe that accrediting organizations such as the National Institute of Standards and Technology and the American Association for Laboratory Accreditation can establish an accreditation process for tests on such products if the demand exists. Our specific proposals are as follows:

a. Relax the requirements from certification or notification to the DoC procedure for the following Part 15 unintentional radiators: CB receivers; superregenerative receivers; all other Part 15 receivers; and, TV Interface Devices (including video cassette recorders and TV video games), except that we will require certification for cable system terminal devices to ensure against marketing of such devices for theft of cable service. We will continue to require certification for scanning receivers to ensure that they meet the Congressionally mandated requirement of Section 15.121 that they do not tune frequencies allocated to the Domestic Public Cellular Radio Telecommunications Service.[18]

b. Relax the requirements for Part 18 consumer ISM (industrial, scientific and medical) equipment from certification to the DoC procedure. This includes such devices as consumer microwave ovens, RF lighting devices, and ultrasonic jewelry cleaners.

c. Relax the requirements for wildlife tracking and ocean buoys operating under Part 5 from notification to verification.[19]

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17 See Report and Order in Gen. Docket 82-242, 48 FR 3614, published January 26, 1983, In the Matter of Amendment of Part 2 of the Rules to Simplify the Equipment Authorization Procedures. See also Report and Order in Gen Docket No. 83-10, 49 FR 3991, published February 1, 1984, In the Matter of Amendment of the Regulations to Expand the Notification and Verification Equipment Authorization Procedures. See also Errata in Gen Docket No. 83-10, 49 FR 8252, published March 6, 1984.

18 See 47 CFR Section 15.121.

19 We have proposed to move this service to Part 90. See the Notice of Proposed Rule Making in ET Docket No. 96-256, adopted December 13, 1996, In the Matter of Amendment of Part 5 of the Commission's rules to Revise the Experimental Radio Service Regulations.

d. Relax the requirements for Part 101 point-to-point microwave transmitters from notification to the DoC procedure.

e. Relax the requirements for Part 73 standard broadcast (AM transmitters), FM transmitters, television transmitters, and antenna phase monitors from notification to verification.[20]

f. Relax the requirements for Auxiliary Broadcast aural STLs, aural intercity relays, aural STL boosters, aural intercity relay boosters, TV STLs, TV intercity relays, TV translator relays and TV microwave boosters from notification to the DoC procedure.

g. Relax the requirements for Part 78 Cable Television Relay fixed transmitters from notification to the DoC procedure.

h. Relax the requirement for Part 80 INMARSAT equipment from notification to verification.

i. Relax the requirement for Part 87 406 Mhz emergency locator transmitters from notification to verification.

j. No changes for equipment that is currently subject to either the DoC or verification procedures. Specifically, the following equipment would remain subject to verification: digital devices (other than personal computer equipment); FM and TV broadcast receivers; non-consumer ISM equipment; and stand-alone cable input selector switches. Personal computer equipment can continue to be authorized under the DoC procedure.

19. We propose to retain the certification requirements for Part 15 intentional radiators, including spread spectrum devices, cordless telephones, remote control and security devices, field disturbance sensors, unlicensed PCS (Personal Communications Service) devices and NII (National Information Infrastructure) devices. We have frequently found significant problems in our review of applications for certification of such devices. Further, it has been our experience that such applications frequently raise questions concerning interpretation of the intent of the regulations. We believe that compliance with the regulations would sharply decline in the absence of a Commission pre-market review. This would pose an unacceptable risk of millions of devices entering the marketplace that are capable of causing widespread interference to communications services, including safety and radionavigation services. It is far more efficient to ensure that such products comply with the FCC requirements before they reach the market than to attempt to locate and correct hundreds or even thousands of cases of interference. We note also that interference from such devices has

20 AM stereo transmitters are currently subject to type acceptance. Under this proposal such equipment will fall under the certification procedure.

the potential to thwart new communications services in spectrum for which licensees have made sizeable investments. We believe that the small burden of certification is warranted in order to protect the valuable spectrum resource.

20. We are proposing to shift all equipment currently subject to type acceptance to the certification procedure. This is simply an administrative change and will not lower the threshold of review for compliance with the technical requirements. We note that there have recently been significant changes in the technical requirements for much of the equipment subject to type acceptance. For example, new spectrum efficiency requirements have been specified for transmitters operating in several private land mobile frequency bands. We also observe that certain equipment currently subject to type acceptance must meet new RF exposure guidelines.[21] Continuing Commission oversight through review of applications is essential to the implementation of these requirements. We note that new technologies, such as narrowband and broadband personal communications services, have given rise to significant technical and legal interpretation questions that affect compliance and fair competition among manufacturers and technologies. Therefore, we do not believe that relaxation of the review process is appropriate for equipment currently subject to type acceptance. Here again, we believe that the risks of interference outweigh the small burden of the equipment authorization process. We invite comment, however, as to whether certain equipment that is currently subject to type acceptance might be relaxed to the DoC or verification processes.

21. We invite comments on our specific proposals for changing the equipment authorization requirements for various equipment. In particular, we solicit information as to whether any equipment currently subject to certification or notification should be relaxed to a different procedure than we have proposed. We also invite recommendations as to whether any equipment proposed to be subject to certification should be relaxed to the DoC or verification procedures.

22. We will permit applicants to file under the existing procedures for a period of up to two years. We will also discontinue accepting applications for certification of personal computer equipment at that time since such equipment can be authorized under the DoC procedure. We believe that continuing to authorize equipment under the existing procedures indefinitely would require the Commission to maintain resources for this activity unnecessarily. Further, allowing multiple authorization procedures for specific equipment indefinitely will lead to confusion. We solicit comments on this proposed transition plan. We also invite views as to whether special transition arrangements may be necessary for any aspects of the proposals made herein.

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21 See Report and Order, ET Docket 93-62, released August 1, 1996, FCC 96-326. See, in particular, new Section 2.1091(c).

Electronic Filing of Equipment Authorization Applications

23. We are committed to continually improving the processing of applications for equipment authorization that are required to be submitted to the Commission. We believe the existing process can be streamlined significantly by providing for the electronic filing of such applications. This action would improve the speed with which applications may be filed with the Commission, the accuracy of data input for application processing, the speed of application processing, and the accessibility of equipment authorization information to the public. We anticipate that the current applications processing time of approximately 40 days can be reduced by at least half through these measures. The Commission has engaged a contractor to perform a preliminary requirements analysis and initial system design for the electronic filing of such applications. At this time we do not know precisely when we will initiate electronic filing of applications for certification. The Commission will issue a public notice announcing the acceptance of electronically filed applications at the appropriate time. We are in this notice proposing to recognize electronic signatures on applications. There are also a number of other issues that we believe should be examined before implementing electronic filing of applications.

24. It appears that the most effective means to implement electronic filing would be through the use of the Internet. Initial system design proposes that an application would be completed via an Internet web page located on an FCC Internet server. Attachments, including all exhibits required by the Commission's rules such as manuals, diagrams, photographs, etc., would be copied to a specified FCC file server using file transfer protocol (ftp). Exhibits would follow a standard submission format, and be submitted using tagged image format (tif) files and/or portable document format (pdf) files. Fees would be paid either by check or by credit card. The application process would be paperless and could be accomplished in a more timely manner since it would be concurrent with fee collection and validation, and some of the examining and technical review functions could be done in parallel. Information on the status of pending applications would be immediately available to the applicant, and information on granted applications and other equipment authorization information would be immediately available to the general public. We request comments on this general approach.

25. We are considering whether to require that all equipment authorization applications be filed electronically. While we recognize that not all applicants would have on-site access to equipment that would permit electronic filing, we believe that a majority of equipment authorization applicants are on the "cutting edge" of technology, and would have ready access to equipment and software to permit them to file electronically. Furthermore, this function could be incorporated into the service provided by testing laboratories, or could be performed by many of the private companies that are available for digitizing and electronically transmitting photographs and documents. The benefits to the applicant would be seen in an improved speed of service due to more timely application receipt, as well as an increase in processing resources that would be freed from data input and paper file management. We invite comment on the possible complete elimination of paper applications.

26. The Commission frequently receives requests to examine and copy applications for equipment authorization after they have been granted.[22] If implemented, the proposed electronic filing initiative would result in digitized storage of all equipment authorization application information. We are considering how we can best make the applications available to the public once they are granted.[23] While all application information could be made available via the Internet, we are concerned that the volume of information contained in each application could cause an overall degradation of service to users. An alternative would be to provide via the Internet the information that users consider most useful, such as the application Form 731, and designate an outside contractor that could provide the remaining information upon request. Specific comments are requested on this approach and whether certain other basic information such as the measurement report should be made available over the Internet. We also solicit views on the vehicle and media that is most beneficial for distributing application information.

## PROCEDURAL MATTERS

27. This is a non-restricted notice and comment rule making proceeding. Ex parte presentations are permitted, except during the Sunshine Agenda period, provided they are disclosed as provided in the Commission's rules. See generally 47 CFR Sections 1.1202, 1.1203, and 1.1206(a).

28. Initial Regulatory Flexibility Analysis. As required by Section 603 of the Regulatory Flexibility Act, the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the expected impact on small entities of the proposals suggested in this document. The IRFA is set forth in Appendix A. Written public comments are requested on the IRFA. These comments must be filed in accordance with the same filing deadlines as comments on the rest of the Notice, but they must have a separate and distinct heading designating them as responses to the Initial Regulatory Flexibility Analysis. The Secretary shall send a copy of this Notice of Proposed Rule Making, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration in accordance with paragraph 603(a) of the Regulatory Flexibility Act. Pub. L. No. 96-354, 94 Stat. 1164, 5 U.S.C. Section 601 et seq (1981).

29. Comment Dates. Pursuant to applicable procedures set forth in Sections 1.415 and 1.419 of the Commission's Rules, 47 C.F.R. Sections 1.415 and 1.419, interested parties may file comment on or before **[75 days from date of publication in the Federal Register]** and reply comments on or before **[105 days from date of publication in the Federal**

[22] See 47 CFR § 0.457(d)(1)(ii). Applications for equipment authorization, and materials relating to the applications are not routinely available for public inspection prior to the effective date of authorization.

[23] We would of course continue to apply all the regulations pertaining to inspection of records and granting of confidentiality in accordance with 47 CFR Section 0.451, et seq.

**Register]**. To file formally in this proceeding, you must file an original and five copies of all comments, reply comments, and supporting comments. If you want each Commissioner to receive a personal copy of your comments, you must file an original plus nine copies. You should send comments and reply comments to Office of the Secretary, Federal Communications Commission, Washington, D.C. 20554. For parties addressing issues related to Part 68, an additional copy of the comments and replies should be provided to the Chief, Common Carrier Bureau. Comments and reply comments will be available for public inspection during regular business hours in the FCC Reference Center of the Federal Communications Commission, Room 239, 1919 M Street, N.W., Washington, D.C. 20554.

30. This Notice contains modifications to existing information collections. As part of the Commission's continuing effort to reduce paperwork burden, we invite the general public and other Federal agencies to take this opportunity to comment on the information collections contained in this Notice, as required by the Paperwork Reduction Act of 1995, Public Law 104-13. Public and agency comments are due **[60 days after publication of this Notice in the Federal Register]**. Comments should address (a) whether the collections of information are necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimates; (c) ways to enhance the quality, utility, and clarify of the information collected; and (d) ways to minimize the burden of the collections of information on the respondents, including the use of automated collection techniques or other forms of information technology. In addition to filing comments with the Secretary, a copy of any comments on the information collections contained herein should be submitted to Dorothy Conway, Federal Communications Commission, Room 234, 1919 M Street, N.W., Washington, D.C. 20554, or via the Internet to dconway@fcc.gov.

31. The proposed action is authorized under Sections 4(i), 301, 302, 303(e), 303(f), 303(r), 304 and 307 of the Communications Act of 1934, as amended, 47 U.S.C. Sections 154(i), 301, 302, 303(e), 303(f), 303(r), 304 and 307.

32. For further information regarding this Notice of Proposed Rule Making, contact Julius P. Knapp, (301) 725-1585 x 201 or John Reed, Office of Engineering and Technology, (202) 418-2455.

FEDERAL COMMUNICATIONS COMMISSION

William F. Caton
Acting Secretary

## APPENDIX A

## INITIAL REGULATORY FLEXIBILITY ANALYSIS

As required by Section 603 of the Regulatory Flexibility Act,[24] the Commission has prepared an Initial Flexibility Analysis (IRFA) of the expected significant economic impact on small entities by the policies and rules proposed in this Notice of Proposed Rule Making ("Notice"). Written public comments are requested on the IRFA. These comments must be filed in accordance with the same filing deadlines as comments on the rest of the Notice but they must have a separate and distinct heading designating them as responses to the IRFA. The Secretary shall send a copy of this Notice, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration in accordance with paragraph 603(a) of the Regulatory Flexibility Act.

### I. Need For and Objectives of the Proposed Rule:

This rule making proceeding is initiated to obtain comment regarding proposals to improve the Federal Communications Commission equipment authorization program for telecommunications equipment and electronics products.

The Commission seeks to: simplify and streamline the equipment authorization process for telecommunications equipment and electronics products; deregulate the equipment authorization requirements for certain equipment; and implement electronic filing of applications.

### II. Legal Basis:

The proposed action is authorized under Sections 4(i), 301, 302, 303(e), 303(f), 303(r), 304 and 307 of the Communications Act of 1934, as amended, 47 U.S.C. Sections 154(i), 301, 302, 303(e), 303(f), 303(r), 304 and 307.

### III. Description and Estimate of the Number of Small Entities to Which the Proposed Rule Will Apply:

For the purposes of this NPRM, the RFA defines a "small business" to be the same as a "small business concern" under the Small Business Act, 15 U.S.C. § 632, unless the

[24] 5 U.S.C. § 603.

Commission has developed one or more definitions that are appropriate to its activities.[25] Under the Small Business Act, a "small business concern" is one that: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) meets any additional criteria established by the Small Business Administration (SBA).[26]

The Commission has not developed a definition of small entities applicable to RF equipment manufacturers. Therefore, we will utilize the SBA definition applicable to manufacturers of Radio and Television Broadcasting and Communications Equipment. According to the SBA's regulations, an RF equipment manufacturer must have 750 or fewer employees in order to qualify as a small business concern.[27] Census Bureau data indicates that there are 858 U.S. companies that manufacture radio and television broadcasting and communications equipment, and that 778 of these firms have fewer than 750 employees and would be classified as small entities.[28] The Census Bureau category is very broad, and specific figures are not available as to how many of these firms are manufacturers of RF devices. However, we believe that many of the companies that manufacture the RF devices that will be affected by this rulemaking may qualify as small entities. We seek comments to this IRFA regarding the number of small entities to which the proposed rule pertains.

## IV. Description of Projected Reporting, Recordkeeping and Other Compliance Requirements

We are proposing to eliminate the equipment authorization process called notification which requires filing of information with the Commission. We are also proposing to eliminate type acceptance as a separate procedure and instead incorporate the essential requirements into our certification procedure. A number of types of equipment that are currently subject to an equipment authorization by the Commission will be permitted to be self-authorized by the manufacturer. We also plan to implement electronic filing for applications for equipment authorization that will be filed with the Commission. We expect that these actions will result in a significant decrease in the overall recordkeeping requirements.

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[25] See 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in 5 U.S.C. § 632).

[26] 15 U.S.C. § 632.

[27] 13 C.F.R. § 121.201, (SIC) Code 3663.

[28] U.S. Dept. of Commerce, 1992 Census of Transportation, Communications and Utilities (issued May 1995), SIC category 3663.

## V. Significant Alternatives to Proposed Rule Which Minimize Significant Economic Impact on Small Entities and Accomplish Stated Objectives:

The actions proposed in this proceeding will result in a significant decrease in equipment authorization applications that must be filed with the Federal Communications Commission. We believe that small entities will benefit from these proposals because in many cases they will no longer be required to file applications with the Commission. Also, small entities will benefit from the simpler regulations and streamlined process for equipment that continues to require authorization by the FCC. We seek comments to this IRFA regarding these tentative conclusions.

## VI. Federal Rules Which Overlap, Duplicate or Conflict With These Rules

None**.**

## APPENDIX B

## PROPOSED RULE CHANGES

Title 47 of the Code of Federal Regulations Part 2 is proposed to be amended as follows:

1. The authority citation for Part 2 continues to read as follows:

**AUTHORITY: Sections 4, 302, 303, and 307 of the Communications Act of 1934, as amended, 47 U.S.C. Sections 154, 154(i), 302, 303, 303(r), and 307, unless otherwise noted.**

2. Section 2.803 is amended by deleting the references in paragraph (a)(1) to "type acceptance"

3. Section 2.904 is deleted.

4. Section 2.905 is deleted.

5. Section 2.911 is amended by adding a new paragraph (g) to read as follows:

Section 2.911 *Written application required*

* * * * *

(g) "Signed," as used in this section, means an original handwritten signature; however, the Office of Engineering and Technology may allow signature by any symbol executed or adopted by the applicant with the intent that such symbol be a signature, including symbols formed by computer-generated electronic impulses.

6. Section 2.915 is amended by deleting the reference to "type acceptance" and "notification" in paragraphs (a) and (c).

7. Section 2.931 is amended by deleting the reference to type acceptance.

8. Section 2.929 is revised to read as follows:

Section 2.929 *Changes in Ownership or Control of Grantee*

(a) An equipment authorization issued by the Commission may not be assigned, exchanged or in any other way transferred to a second party, except as provided in this section.

(b) The grantee of an equipment authorization may license or otherwise authorize a second party to manufacture the equipment covered by the grant of the equipment authorization provided:

(1) The equipment manufactured by such second party bears the identical name and number as is set out in the grant of the equipment authorization.

Note: Any change in the name or number desired as a result of such production or marketing agreement will require the filing of a new application for an equipment authorization as specified in Section 2.933.

(2) The grantee of the equipment authorization shall continue to be responsible to the Commission for the equipment produced pursuant to such an agreement.

(c) Whenever there is a change in the name and/or address of the grantee of an equipment authorization, written notice of such change(s) shall be submitted to the Commission within 30 days after the grantee starts using the new name and/or address.

(d) In the case of transactions affecting the grantee, such as a transfer of control or sale to another company, mergers, or transfer of manufacturing rights, notice must be given to the Commission in writing within 60 days of the consummation of the transaction. Depending on the circumstances in each case, the Commission may require new applications for equipment authorization. In reaching a decision the Commission will consider whether the acquiring party can adequately ensure and accept responsibility for continued compliance with the regulations. In general, new applications for each device will not be required. A single application for equipment authorization may be filed covering all the affected equipment.

9. Section 2.932 is amended to read as follows:

Section 2.932 *Modification of equipment.*

(a) A new application for an equipment authorization shall be filed whenever there is a change in the design, circuitry or construction of an equipment or device for which an equipment authorization has been issued, except as provided in paragraphs (b) through (d).

(b) Permissive changes may be made in certificated equipment, and equipment that was authorized under the former type acceptance procedure, pursuant to § 2.1043.

(c) Permissive changes may be made in equipment that was authorized under the former type approval or notification procedures without submittal of information to the

Commission. However, the grantee shall submit information documenting continued compliance with the pertinent requirements upon request.

(d) All requests for permissive changes submitted to the Commission must be accompanied by the anti-drug abuse certification required under § 1.2002 of this chapter.

10. Section 2.933 is revised to read as follows:

Section 2.933 *Change in identification of equipment.*

(a) A new application for equipment authorization shall be filed whenever there is a change in the FCC Identifier for the equipment with or without a change in design, circuitry or construction. However, a change in the model/type number or trade name performed in accordance with the provisions in § 2.924 of this chapter is not considered to be a change in identification and does not require additional authorization from the Commission.

(b) An application filed pursuant to paragraph (a) of this section where no change in design, circuitry or construction is involved, need not be accompanied by a resubmission of equipment or measurement or test data customarily required with a new application, unless specifically requested by the Commission. In lieu thereof, the applicant shall attach a statement setting out:

(1) The original identification used on the equipment prior to the change in identification.

(2) The date of the original grant of the equipment authorization.

(3) [Reserved]

(4) How the equipment bearing the modified identification differs from the original equipment.

(5) Whether the original test results continue to be representative of and applicable to the equipment bearing the changed identification.

(6) The photographs required by § 2.983(f).

(7) [Reserved]

(c) If the change in the FCC Identifier also involves a change in design or circuitry which falls outside the purview of a permissive change described in § 2.1043, a complete application shall be filed pursuant to § 2.911.

11. Section 2.934 is deleted.

12. Section 2.935 is deleted.

13. Section 2.938 is amended by revising paragraph (c), to read as follows:

Section 2.938 *Retention of records.*

* * * * *

(c) The records listed in paragraph (a) of this section shall be retained for one year for equipment subject to authorization under the certification procedure or former type acceptance procedure, or for two years for equipment subject to authorization under any other procedure, after the manufacture of said equipment has been permanently discontinued, or until the conclusion of an investigation or a proceeding if the responsible party (or under paragraph (b) of this section the manufacturer) is officially notified that an investigation or any other administrative proceeding involving its equipment has been instituted.

* * * * *

14. Section 2.943 is amended by deleting the reference to type acceptance and notification in paragraph (a).

15. Section 2.946 is amended by revising paragraph (b) to read as follows:

Section 2.946 *Penalty for failure to provide test samples and data.*

* * * * *

(b) In the case of equipment involving harmful interference, safety of life and property, or where equipment is widely available on the market and is suspected of noncompliance, the Commission may specify that test samples be submitted within less than 60 days, but not less than 14 days. Upon request the responsible party shall provide a voucher for purchase of a sample of the equipment at a retail outlet. Failure to comply within the specified time period will be subject to the sanctions specified in paragraph (a).

* * * * *

16. Section 2.948 is amended by deleting reference to notification in paragraph (a)(2).

17. The title "Notification" preceding Section 2.971 is deleted

18. Section 2.971 is deleted.

19. Section 2.973 is deleted.

20. Section 2.975 is deleted.

21. Section 2.977 is deleted.

22. Section 2.979 is deleted.

23. The title "Type Acceptance" preceding Section 2.981 is deleted.

24. Section 2.981 is deleted.

25. Section 2.983 is deleted.

26. Section 2.985 is renumbered as Section 2.1085.

27. Section 2.987 is renumbered as Section 2.1087.

28. Section 2.989 is renumbered as Section 2.1089.

29. Section 2.991 is renumbered as Section 2.1091.

30. Section 2.993 is renumbered as Section 2.1093.

31. Section 2.995 is renumbered as Section 2.1095.

32. Section 2.997 is renumbered as Section 2.1097.

33. Section 2.999 is renumbered as Section 2.1099 and the term "type acceptance" is replaced with the term "certification".

34. Section 2.1001 is deleted.

35. Section 2.1003 is deleted.

36. Section 2.1005 is deleted.

37. Section 2.1033 is amended to read as follows:

Section 2.1033 *Application for Certification*

(a) An application for certification shall be filed on FCC Form 731 with all questions answered. Items that do not apply shall be so noted.

(b) The application shall be accompanied by a technical report containing the following information:

(1) The full name and mailing address of the manufacturer of the device and the applicant for certification.

(2) FCC identifier.

(3) A copy of the installation and operating instructions to be furnished the user. A draft copy of the instructions may be submitted if the actual document is not available. The actual document shall be furnished to the FCC when it becomes available.

(4) A copy of the schematic diagram of the circuitry along with a description of the circuit functions of the device and a statement describing how the device operates. This statement should contain a description of the ground system and antenna, if any, used with the device.

(5) A block diagram showing the frequency of all oscillators in the device. The signal path and frequency shall be indicated at each block. The tuning range(s) and intermediate frequency(ies) shall be indicated at each block.

(6) A report of measurements showing compliance with the pertinent FCC technical requirements. This report shall identify the test procedure used (e.g., specify the FCC test procedure, or industry test procedure that was used), the date the measurements were made, the location where the measurements were made, and the device that was tested (model and serial number, if available). The report shall include sample calculations showing how the measurement results were converted for comparison with the technical requirements.

(c) The following additional information must be provided as appropriate for equipment operating under Parts 15 or 18:

(i) If the equipment for which certification is being sought must be tested with peripheral or accessory devices connected or installed, a brief description of those peripherals or accessories. The peripheral or accessory devices shall be unmodified, commercially available equipment.

(ii) For equipment subject to the provisions of Part 15 of this chapter, the application shall indicate if the equipment is being authorized pursuant to the transition provisions in section 15.37 of this chapter.

(iii) Applications for the certification of direct sequence spread spectrum transmitters under Part 15 shall be accompanied by an exhibit demonstrating compliance with the processing gain provisions of §15.247(e) of this chapter. Applications for the certification of frequency hopping transmitters under Part 15 shall be accompanied by an exhibit describing compliance of the associated receiver or receivers with Section 15.247(a)(1) of this chapter.

(iv) Applications for the certification of scanning receivers shall include a statement describing the methods used to comply with the design requirements of § 15.121(a) of this chapter or the marketing requirements of § 15.121(b) of this chapter.

(d) The following additional information must be provided as appropriate for equipment other than that operating under Parts 15 or 18:

(i) Type or types of emission.

(ii) Frequency range.

(iii) Range of operating power values or specific operating power levels, and description of any means provided for variation of operating power.

(iv) Maximum power rating as defined in the applicable part(s) of the rules.

(v) The dc voltages applied to and dc currents into the several elements of the final radio frequency amplifying device for normal operation over the power range.

(vi) Tune-up procedure over the power range, or at specific operating power levels.

(vii) A description of all circuitry and devices provided for determining and stabilizing frequency, for suppression of spurious radiation, for limiting modulation, and for limiting power.

(viii) For equipment employing digital modulation techniques, a detailed description of the modulation system to be used, including the response characteristics (frequency, phase and amplitude) of any filters provided, and a description of the modulating wavetrain, shall be submitted for the maximum rated conditions under which the equipment will be operated.

(ix) The data required by Sections 2.1085 through 2.1097, inclusive, measured in accordance with the procedures set out in Section 2.1099.

(x) Measurements must be submitted showing compliance with Section 73.940 for an encoder device used for the generation of the EBS Attention Signal as defined in section 73.906.

(xi) The application for type acceptance of an external radio frequency power amplifier under Part 97 of this chapter need not be accompanied by the data required by Paragraph (e) of this section. In lieu thereof, measurements shall be submitted to show compliance with the technical specifications in Subpart C of Part 97 of this chapter and such information as required by Section 2.1105 of this part.

(xii) An application for type acceptance of an AM broadcast stereophonic exciter-generator intended for interfacing with existing type-accepted or notified transmitters must include measurements made on a complete stereophonic transmitter. The instruction book must include complete specifications and circuit requirements for interconnecting with existing transmitters. The instruction book must also provide a full description of the equipment and measurement procedures to monitor modulation and to verify that the combination of stereo exciter-generator and transmitter meet the emission limitations of section 73.44.

(e) A single application may be filed for a composite system that incorporates devices subject to certification under multiple rule parts, however, the appropriate fee must be included for each device. Separate applications must be filed if different FCC Identifiers will be used for each device.

38. Section 2.1041 is deleted.

39. Section 2.1043 is amended to read as follows:

Section 2.1043 *Changes in certificated equipment.*

(a) Changes to the basic frequency determining and stabilizing circuitry (including clock or data rates), frequency multiplication stages, basic modulator circuit or maximum power or field strength ratings shall not be performed without application for and authorization of a new grant of certification. Variations in electrical or mechanical construction, other than these indicated items, are permitted provided the variations either do not affect the characteristics required to be reported to the Commission or the variations are made in compliance with the other provisions of this section.

(b) Two classes of permissive changes may be made in certificated equipment without requiring a new application for and grant of certification. Neither class of change shall result in a change in identification.

(1) A Class I permissive change includes those modifications in the equipment which do not degrade the characteristics reported by the manufacturer and accepted by the Commission when certification is granted. No filing with the Commission is required for a Class I permissive change.

(2) A Class II permissive change includes those modifications which degrade the performance characteristics as reported to the Commission at the time of the initial certification. Such degraded performance must still meet the minimum requirements of the applicable rules. When a Class II permissive change is made by the grantee, he shall supply the Commission with complete information and the results of tests of the characteristics

affected by such change. The modified equipment shall not be marketed under the existing grant of certification prior to acknowledgement by the Commission that the change is acceptable.

(3) Permissive changes, as detailed above, shall be made only by the holder of the grant of certification. Changes by any party other than the grantee require a new application for and grant of certification.

(c) A grantee desiring to make a change other than a permissive change shall file an application on FCC Form 731 accompanied by the required fees. The grantee shall attach a description of the change(s) to be made and a statement indicating whether the change(s) will be made in all units (including previous production) or will be made only in those units produced after the change is authorized.

(d) A modification which results in a change in the identification of a device with or without change in circuitry requires a new application for, and grant of certification. If the changes affect the characteristics required to be reported, a complete application shall be filed. If the characteristics required to be reported are not changed the abbreviated procedure of section 2.933 may be used.

(e) Equipment that has been certificated or formerly type accepted for use in the Amateur Radio Service pursuant to the requirements of Part 97 of this chapter may be modified without regard to the conditions specified in Paragraph (b) of this section, provided the following conditions are met:

(1) Any person performing such modifications on equipment used under Part 97 of this chapter must possess a valid amateur radio operator license of the class required for the use of the equipment being modified.

(2) Modifications made pursuant to this paragraph are limited to equipment used at licensed amateur radio stations.

(3) Modifications specified or performed by equipment manufacturers or suppliers must be in accordance with the requirements set forth in Paragraph (b) of this section.

(4) Modifications specified or performed by licensees in the Amateur Radio Service on equipment other than that at specific licensed amateur radio stations must be in accordance with the requirements set forth in Paragraph (b) of this section.

(5) The station licensee shall be responsible for insuring that modified equipment used at his station will comply with the applicable technical standards in Part 97 of this chapter.

(f) for equipment other than that operating under Parts 15 or 18, when a Class II permissive change is made by other than the grantee of type acceptance, the information and

data specified in paragraph (b)(2) of this section shall be supplied by the person making the change. The modified equipment shall not be operated under an authorization of the Commission prior to acknowledgement by the Commission that the change is acceptable.

(g) The interconnection of a certificated or formerly type accepted AM broadcast stereophonic exciter-generator with a certificated or formerly type accepted AM broadcast transmitter in accordance with the manufacturer's instructions and upon completion of measurements showing that the modified transmitter meets the emission limitation requirements of section 73.44 is defined as a Class I permissive change for compliance with this section.

(h) The interconnection of a multiplexing exciter with a certificated or formerly type accepted AM broadcast transmitter in accordance with the manufacturer's instructions without electrical or mechanical modification of the transmitter circuits and completion of equipment performance measurements showing the transmitter meets the minimum performance requirements applicable thereto is defined as a Class I permissive change for compliance with this section.

(i) The addition of TV broadcast subcarrier generators to a certificated or formerly type accepted TV broadcast transmitter or the addition of FM broadcast subcarrier generators to a type accepted FM broadcast transmitter, provided the transmitter exciter is designed for subcarrier operation without mechanical or electrical alterations to the exciter or other transmitter circuits.

(j) The addition of TV broadcast stereophonic generators to a certificated or formerly type accepted TV broadcast transmitter or the addition of FM broadcast stereophonic generators to a certificated or formerly type accepted FM broadcast transmitter, provided the transmitter exciter is designed for stereophonic sound operation without mechanical or electrical alterations to the exciter or other transmitter circuits.

(k) The addition of subscription TV encoding equipment for which the FCC has granted advance approval under the provisions of Section 2.1400 in Subpart M and Section 73.644(c) of Part 73 to a certificated or formerly type accepted transmitter is considered a Class I permissive change.

(l) Notwithstanding the provisions of this section, broadcast licensees or permittees are permitted to modify certificated or formerly type accepted equipment pursuant to Section 73.1690 of the FCC's Rules.

40. A new Section 2.1080 is added to read as follows:

Section 2.1080 *Measurement Procedures*

The measurement procedures are specified in the rules governing the particular device for which certification is requested. For equipment operating in the authorized radio services, measurements are required as specified in §§ 2.1081, 2.1083, 2.1091, 2.1093, 2.1097, and 2.1099.

41. A new Section 2.1105 is added to read as follows:

Section 2.1105 *Equipment for use in the Amateur Radio Service*.

(a) The general provisions of §§ 2.1081, 2.1083, 2.1091, 2.1093, 2.1097, 2.1099, and 2.925 shall apply to applications for, and grants of, certification for equipment operated under the requirements of Part 97 of this chapter, the Amateur Radio Service.

(b) When performing the tests specified in Sections 2.1091 and 2.1093 of this part, the center of the transmitted bandwidth shall be within the operating frequency band by an amount equal to 50 percent of the bandwidth utilized for the tests. In addition, said tests shall be made on at least one frequency in each of the bands within which the equipment is capable of tuning.

(c) Any supplier of an external radio frequency power amplifier kit as defined by § 97.3(a)(17) of this chapter shall comply with the following requirements:

(1) Assembly of one unit of a specific type shall be made in exact accordance with the instructions being supplied with the product being marketed. If all of the necessary components are not normally furnished with the kit, assembly shall be made using the recommended components.

(2) The measurement data required for type acceptance shall be obtained for this unit and submitted with the type acceptance application. Unless otherwise requested, it is not necessary to submit this unit with the application.

(3) A copy of the exact instructions which will be provided for assembly of the equipment shall be provided in addition to other material required by section 2.1083 of this part.

(4) The identification label required by § 2.925 of this part shall be permanently affixed to the assembled unit and shall be of sufficient size so as to be easily read. The following information shall be shown on the label:

(Name of Grantee of Type Acceptance)

FCC ID: (The number assigned to the equipment by the grantor)

This amplifier can be expected to comply with part 97 of the FCC Regulations when assembled and aligned in strict accordance with the instruction manual using components with the kit or an exact equivalent thereof.

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(Title and signature of responsible representative of Grantee)

Statement of Compliance

I state that I have constructed this equipment in accordance with the instruction manual and using the parts furnished by the supplier of this kit.

---

(Signature)
(Date)

---

(Amateur call sign) (Class of license)

---

(Expiration date of license)

To be signed by the person responsible for proper assembly of kit.)

(5) If requested, an unassembled unit shall be provided for assembly and test by the Commission. Shipping charges to and from the Commission's Laboratory shall be borne by the applicant.

(d) Certification of external radio frequency power amplifiers and amplifier kits may be denied when denial serves the public interest, convenience and necessity by preventing the use of these amplifiers in services other than the Amateur Radio Service. Other uses of these amplifiers, such as in the Citizens Band Radio Service, are prohibited (§ 95.411 of this chapter). Examples of features which may result in the denial of certification are contained in § 97.317 of this chapter.

## APPENDIX C

## EQUIPMENT CLASSES AND EQUIPMENT AUTHORIZATION PROCEDURES

The procedures shown below as applicable to the particular classes of equipment are those required at the time of publication of this Bulletin.

Key to authorization procedures: £ Certification ■ Notification ¤ Type Acceptance
§ Verification Θ Declaration of Conformity
Δ Certification or Declaration of Conformity

**LICENSED TRANSMITTING EQUIPMENT**

**PART 5: Experimental Radio Service**
- ■ Wildlife tracking (40.66-40.70 MHz and 216-220 MHz)
- ■ Ocean buoy (40.66-40.70 MHz and 216-220 MHz)

**PART 11: Emergency Alert System (EAS) Subpart B**
- £ Emergency alert systems (EAS) Decoders
- £ Emergency alert systems (EAS) Encoders

**PART 21: Domestic Public Fixed**
- ■ Point-to-point microwave (Subpart I)
- ¤ All other transmitters, except those under developmental authorization

**PART 22: Domestic Mobile**
- ¤ Cellular (Subpart K)
- ¤ All other transmitters except those under developmental authorization

**PART 24: Personal Communications Services (PCS)**
- ¤ Narrowband PCS (Subpart D)
- ¤ Broadband PCS (Subpart E)

**PART 73: Broadcast**
- ■ Standard broadcast (AM transmitters)
- ¤ AM stereo exciter-generators
- ■ FM transmitters
- ■ Television transmitters
- ■ Monitors, antenna phase
- ¤ Emergency broadcast systems (EBS) Encoders
- £ Emergency broadcast systems (EBS) Decoders

**PART 74: Auxiliary Broadcast**
- ¤ Remote pickup (Subpart D)
- ■ Aural STL (Subpart E)
- ■ Aural intercity relay (Subpart E)
- ■ Aural STL booster (Subpart E)
- ■ Aural intercity relay booster (Subpart E)
- ¤ Others, except TV pickup under 250 mW (Subpart F)
- ■ TV STL (Subpart F)
- ■ TV intercity relay (Subpart F)
- ■ TV translator relay (Subpart F)
- ■ TV microwave booster (Subpart F)
- ¤ Low power TV (Subpart G)
- ¤ TV translator (Subpart G)
- ¤ Low power auxiliary (Subpart H)
- ¤ Instructional TV, fixed (ITFS)(Subpart I)
- ¤ ITFS response (Subpart I)
- ¤ FM broadcast translator (Subpart L)
- ¤ FM broadcast booster (Subpart L)

**PART 78: Cable Television Relay**
- ■ Cable television relay fixed
- ¤ Cable television relay mobile pickup \1

**PART 80: Maritime**
- ¤ Radiotelephone
- ¤ Radiotelegraph
- ¤ EPIRB
- ¤ Radar
- § Ship earth station \2
- ¤ Radiotelephone alarm signal generators
- ¤ Radiotelephone distress watch receivers
- ¤ Radiotelegraph alarm signal keyers
- ¤ Radiotelegraph auto alarm receivers

**Global Maritime Distress and Safety (GMDSS). Subpart W**
- ¤ All Equipment (except INMARSAT)
- ■ INMARSAT

**PART 87: Aviation**
- ¤ All transmitters, except as provided in Section 87.145(d)
- ■ 406 MHz Emergency Locator Transmitter

Key to authorization procedures: £ Certification ■ Notification ¤ Type Acceptance § Verification
Δ Certification or Declaration of Conformity Θ Declaration of Conformity

**PART 90: Private Land Mobile**

¤ Location & Monitoring Service (Subpart M)
¤ All other fixed transmitters, except as provided in Section 90.203(b)

**PART 95: Personal Radio Services**

¤ General mobile
¤ Radio control 27 MHz \4
¤ Radio control 72 MHz
¤ Citizen band (CB)
£ Family Radio Service
¤ Low Power Radio Service

**Interactive Video Display Services (IVDS), Subpart F**

¤ CTS and RTU transmitters

**PART 97: Amateur Radio Service**

¤ External RF power amplifiers below 144 MHz, except as provided in Section 2.815 and Section 97.75

**PART 101: Fixed Microwave Services**

¤ All fixed transmitters, except those under developmental authorization \5

**PART 15: NON-LICENSED EQUIPMENT**

**UNINTENTIONAL RADIATORS (SUBPART B)**

§ TV broadcast receivers \6
§ FM Broadcast receivers
£ CB receivers
£ Scanning Receivers \7
£ Superregenerative receivers
■ All other Part 15 receivers \11
£ TV interface devices \14
■ Cable system terminal devices \13
Δ Class B personal computers & peripherals as defined in Sec. 15.5(s) & 15.5(r) \9, \10
Δ CPU boards & power supplies used with Class B personal computers \9, \10
Θ Class B personal computers assembled using certified CPU boards or power supplies \9
§ Class B external switching power supplies not used with personal computers \9
§ Other Class B digital devices & peripherals \9
§ Class A digital devices and peripherals \9
§ Stand-alone cable input selector switch
§ External switching power supplies
§ All other Part 15 devices

**INTENTIONAL RADIATORS SUBPART C**

£ Auditory assistance transmitters
£ Cordless telephones (TX section) \8, \12
£ Field disturbance sensors
£ Spread spectrum transmitters
£ Telemetry transmitters
£ Unlicensed PCS Devices (Subpart D)
£ Unlicensed NII Devices (Subpart E)
£ Wireless microphones
£ Millimeter Wave transmitters

**PART 18: INDUSTRIAL, SCIENTIFIC AND MEDICAL (ISM) EQUIPMENT**

£ All ISM devices for consumer use, except ultrasonic devices generating less than 500 watts and operating below 90 kHz
§ Ultrasonic devices generating less than 500 watts and operating below 90 kHz
§ All other ISM devices, except those exempt under Section 18.121

**NOTES TO TABLE**

1. No equipment authorization is required for transmitters with output power 250 mW or less, used in the Cable Television Relay Service (CARS) pickup stations.

2. Applies to ship earth station transmitters in the INMARSAT system. See Section 80.203.

3. Citizens band and radio control transmitters are not required to be operated under a radio station license. See Part 95.

4. No equipment authorization is required when transmitter is crystal controlled and meets the technical requirements in Part 95.

5. Equipment authorization is not required for portable transmitters operating below 250 mW.

6. Television broadcast receivers which include an "RGB" (red-green-blue) terminal to permit use of

the picture tube of the receiver as a display device for personal computer peripherals must also be certified as personal computer peripherals. See Note 10 also.

7. The definition of "scanning receiver" for this purpose is given in Section 15.3(v) as follows: "...a receiver that automatically switches among four (4) or more frequencies in the range of 30 to 960 MHz and which is capable of stopping at and receiving a radio signal detected on a frequency. Receivers designed solely for the reception of broadcast signals under Part 73, or for operation as part of a licensed station, are not included in this definition.

   Pursuant to Section 15.121 of the Rules, scanning receivers that are capable of operating (tuning), or being readily altered by the user to operate, within the frequency band allocated to the Domestic Public Cellular Radio Telecommunications Service in Part 22 (cellular telephone bands), or capable of converting digital cellular transmissions to analog voice audio are not eligible for equipment authorization. Scanning receivers that do not comply with the provisions of Section 15.121 may not be manufactured or imported on and after April 26, 1994.

8. The base station of cordless telephones stations also require registration under Part 68 of the Rules.

9. Computer peripherals interfacing with the telephone network also require registration under Part 68 of the Rules.

10. Class B personal computers and peripherals, CPU boards and power supplies used with Class B personal computers may be authorized under the Certification procedure, which requires the submission of a formal application, FCC Form 731, fees and supporting documentation, or the Declaration of Conformity (DoC) procedure. No filing with the FCC is required for digital devices authorized under the DoC procedure.

11. Multiband receivers will generally fall under the Notification procedure. Exceptions are as follows:
    (a) A multiband receiver which includes a CB band is subject to certification.
    (b) An AM/FM/TV sound-only receiver is subject only to verification.

12. The receiver section of transceivers, the transmitter portion of which is subject to type acceptance, certification or notification, is subject to verification. See Section 15.101(b) of the Rules.

13. See Section 15.3(e) for the definition of Cable System Terminal Devices (CSTDs).

14. See Section 15.3(y) for the definition of TV interface devices and Section 15.25 for information pertaining to kits.